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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,668	09/27/2001	Glen J. Desargent	7784-000363	2851
27572	7590	04/20/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303				WIMER, MICHAEL C
ART UNIT		PAPER NUMBER		
		2821		

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/965,668	DESARGANT ET AL.	
Examiner	Art Unit		
Michael C. Wimer	2821		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12/30/2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,4,7-9 and 12-17 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1,4,7-9 and 12-17 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

10- antenna system

12- main reflector, and

16- feed horn.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 210 and 212a in Fig. 5.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to because numeral "102" in Fig. 4 appears to be the "straight line axis 108" rather than a reflector, because the lead line points thereto. Instead, it appears that the lead line for 102 should point to the curved surface the same as the center point 102a.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1,4,7-9 and 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claims 1,4,7 and 9, there is a recitation of "said rotary joint" (for example, in Claim 1, line 13, in Claim 4, line 16 and in Claims 7 and 9, line 12) without any interrelationship with the other structure. There is no proper antecedent basis for this language. How does the rotary joint relate to the reflector and platform?

This is especially confusing since Claim 4 lacks a clear and proper antecedent basis for "said platform" because line 6 recites a "member" that mounts the reflector.

Claims 1,4,7 and 9 now recite "an outermost edge" of the main reflector. Such an edge is unclear in how it reads on the disclosure. An edge is often thought of as the rim edge of the reflector. In the reflector of the invention, the azimuthal axis passes through the rim of the reflector at two points. But, it is not seen how the axis is maintained at an outermost edge of the reflector at all times during azimuthal rotation of the reflector.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1,4,7-9 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (3860930) in view of Densmore et al (5398035).

Regarding Claims 1,4,7 and 9, Peterson shows in Fig. 10, a method for mounting, and a rotatable reflector 40 for reducing the radius of a swept arc (see Fig. 11), the steps and structure comprising, a support platform 102, motor 103 for rotating about an azimuth axis of rotation 100, and locating the axis forwardly of a plane perpendicular through the reflector's center axis and the axis is maintained at an outmost edge of the reflector, all arranged as claimed.

Peterson teaches in col. 5, second and third paragraphs, and in Fig. 10, that the tips or maximum chord of the dish reflector 40 may be mounted anywhere between the lines 130 and 131, which includes a position of the outermost edge of the reflector coinciding with the azimuth axis at 100. It would have been obvious to the skilled artisan to position the maximum chord at the azimuth axis at all times in scanning rotation as claimed. Densmore et al are cited as resolving the level of ordinary skill in the antenna scanning art by teaching a well known (optical) encoder to track azimuth rotation. It would have been obvious to the skilled artisan to employ such a device in Peterson for the purpose of tracking angle.

Response to Arguments

8. Applicant's arguments with respect to claims of record have been considered but are moot in view of the new ground(s) of rejection.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wimer whose telephone number is (571) 272-1833. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael C. Wimer
Primary Examiner
Art Unit 2821

MCW
08 April 2004